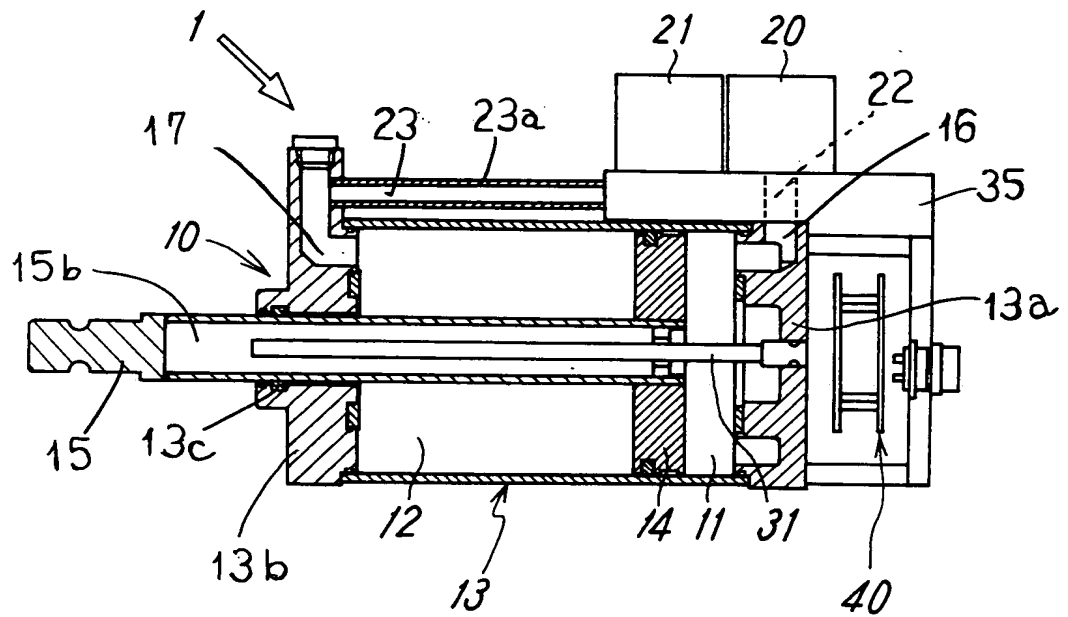


FIG. 1





The diagram illustrates a control system for a mechanical assembly. A **COMMAND SIGNAL** is input to a **CONTROLLER**. The controller is connected to a **100**, which is a multi-channel signal processor or amplifier. The output of **100** is connected to a **105**, which is a motor or actuator. The motor **105** is mechanically coupled to a vertical assembly consisting of a **101** (top part), a **103** (middle part), and a **102** (bottom part). A **104** is a sensor or switch located near the bottom of the assembly. The sensor **104** is connected to the **100**. A **106** is a feedback signal source, possibly a potentiometer, connected to the **100** and the **101**. The **106** is also connected to a **P/E** (Position Error) block and an **X/E** (Velocity Error) block. The **P/E** block is connected to the **100**, and the **X/E** block is connected to the **105**. The **100** is also connected to a **103** (middle part of the assembly).

FIG. 3

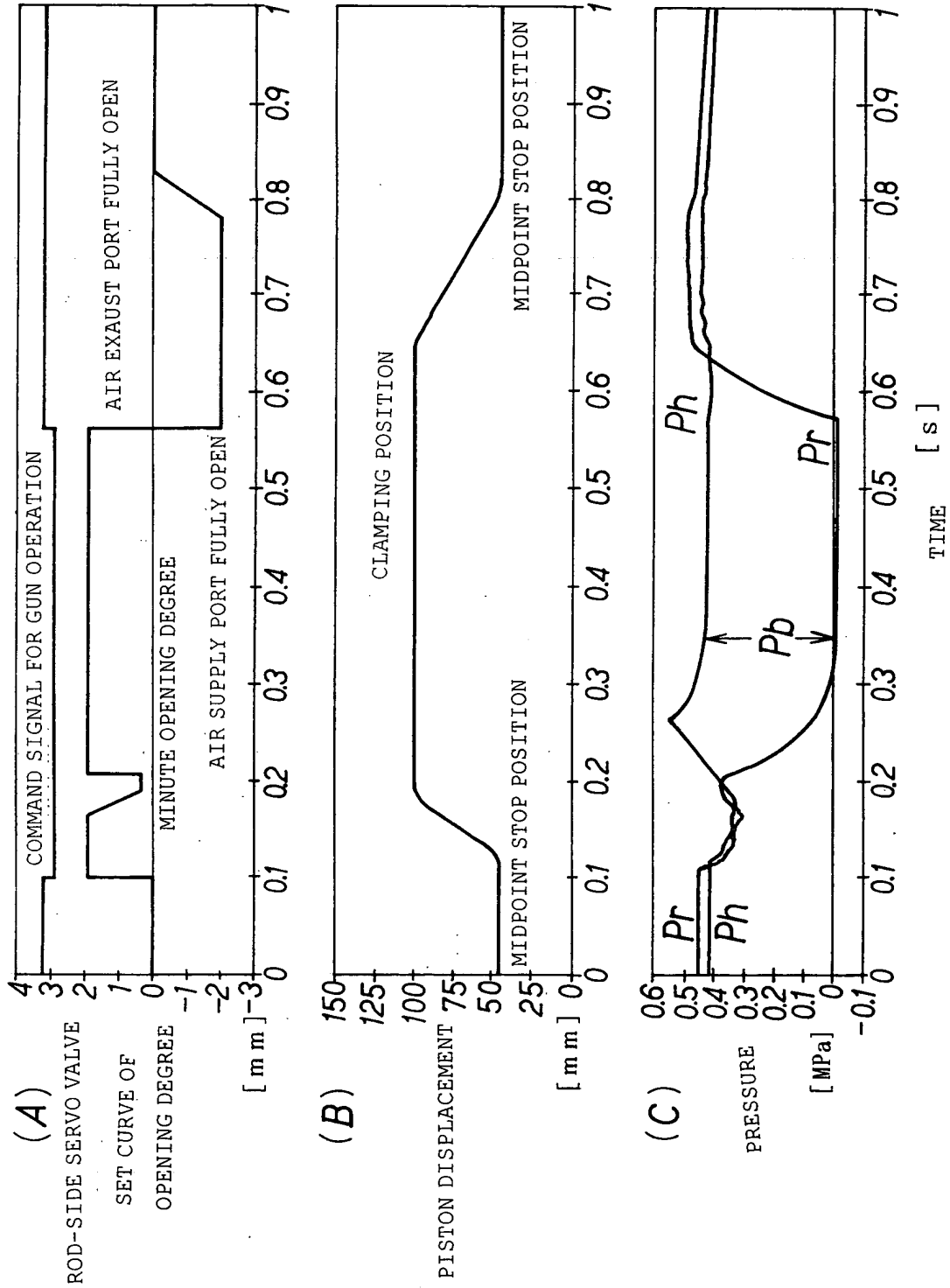


FIG. 4

